

REMARKS

Applicant appreciates the Examiner's recognition of the allowability of claims 2-6 and 13. Applicant appreciates the courtesies extended by Examiner Bill Miller during a brief telephonic interview on April 12, 2005 with Applicant's attorneys, Allan A. Fanucci and Jeffrey A. Wolfson. As a result of this brief discussion, Applicant has filed a Request for Continued Examination rather than responding to the Office Action. The comments appearing herein summarize, and are substantially in accord with, those presented and discussed during the interview.

Claims 1-27, as amended, and new claims 28-38 are pending for the Examiner's consideration. Claim 8 has been amended to respond to the objection by removing the language "-type." Various claims have been amended to recite that the surface(s) of the claimed jewelry article are formed, such as by lathing, grinding, or any other suitable method(s). As these are considered irrelevant to the patentability of the article-type claims, Applicants do not believe they introduce new matter or otherwise alter the claim scope. Claims 11-13 have been amended to clarify that the slot, groove, or notch in the annular ring does not extend entirely through the ring or that the decorative component extends into the ring but not entirely through the ring (*See, e.g.*, FIG. 2). Claims 16 and 18 have been amended to more clearly and distinctly recite that the ring is a finger ring and that the aperture is configured and dimensioned to receive a finger in particular (*See, e.g.*, Specification at page 4, line 25; and FIGS. 1-5). Claim 19 has been amended to recite a different embodiment of the invention, where a hard metal-containing portion in the form of a coating is disposed over a portion of the hard material (*See, e.g.*, Specification at page 11, lines 24-29).

New claims 28-38 recite various preferred embodiments of the invention to more clearly and distinctly recite the annular ring-type jewelry article, each being structurally distinct from other types of articles, *e.g.*, a watch case. New claims 28 and 35 each recite that the cylindrically shaped exterior portion comprises a continuous groove or slot that extends into, and at least substantially around, the circumference of the annular ring and that is configured and adapted to receive an insert of an annularly-shaped precious metal decoration component that provides a different visual effect to the ring relative to the hard material, and new claims 29 and 36 each recite that the groove or slot extends entirely around the ring (*See, e.g.*, FIG. 2). In another embodiment recited in new claims 30 and 35, a surface of the cylindrically shaped exterior portion is coextensive with an outer surface of the annularly-shaped decoration component, and the surface is recessed from the external surface of

annular ring (*See, e.g.*, FIGS. 7-8; page 9, lines 8-10 and 17). New claim 31 recites that the continuous portion includes every point on the inner and external surfaces, *i.e.*, there is a continuous circumferential portion that is concentric at every axial cross-section (*See, e.g.*, FIG. 2). New claim 32 recites a preferred embodiment wherein the entire external surface is cylindrical, while new claim 33 recites that a portion of the external surface is rounded across a cross-section of the annular ring that is transverse to the concentric continuous portion (*See, e.g.*, page 11, lines 7-9; FIGS. 9 and 14). In one preferred embodiment, the annular ring has inner and outer circumferences and includes first and second rounded surfaces that extend around the outer circumference of the annular ring that forms first and second outer surfaces of the body proximate first and second axial extremities thereof, respectively, with a cylindrically shaped exterior portion forming a third surface extending around the outer circumference of the ring and being disposed between the first and second rounded surfaces (*See, e.g.*, claim 2; FIGS. 9 and 14; and page 11, lines 7-9). Additionally, new claim 38 recites that the inner and external surfaces are also parallel at the continuous and concentric portion (*See, e.g.*, claims 31-32). No new matter has been added by these claim amendments, such that the claims are believed to be in condition for entry and allowance at this time.

Initially, Applicant notes that the Sixth Information Disclosure Statement ("IDS") was filed on March 29, 2005. To make the record perfectly clear, Applicant respectfully requests the execution and return of the Form PTO-1449 accompanying that IDS. A copy of this Form PTO-1449 has been submitted herewith for the Examiner's convenience.

Claims 1, 7-12, and 14-27 were rejected under 35 U.S.C. § 103(a) for obviousness over U.S. Patent No. 3,242,664 to Lederrey ("Lederrey") in view of U.S. Patent No. 2,062,891 in view of Kousin ("Kousin") on pages 2-4 of the Office Action. The Patent Office states that Lederrey discloses a jewelry article including an annular body of tungsten carbide and a metal binder with an exterior surface polished to a gray mirror finish that is long wearing and virtually indestructible during normal use of the jewelry. Further, the Office Action states that the annular body of Lederrey has at least one external surface 2 in a circular shape and a circular inner surface 9, with a continuous portion of each of these inner and external surfaces being concentric around the circumference. Moreover, the Office Action states that Lederrey discloses an annular slot defined by uppermost surface 8, which receives an insert 3 of a watch glass retained in the cavity by mechanical fit. Also, Kousin is stated to disclose oval-shaped or ring-shaped watch cases that would have made it obvious to modify Lederrey to provide the annular body in ring or circular form for aesthetic purposes.

Initially, claim 1 recites a continuous portion of each of the inner and external surfaces is concentric around the circumference of the ring, which Lederrey fails to disclose or suggest, in part because it discloses only a *watch case* including a portion made of tungsten carbide, rather than the presently claimed jewelry ring. A ring is a completely different structure from a watch case, and involves different manufacturing techniques, as well. In particular, while Lederrey does disclose external surface 2 and inner surface 9, and that structure is circular, surfaces 2 and 9 of Lederrey are *not* concentric as presently recited. Rather, Lederrey teaches two *parallel* surfaces that are part of one structure (piece 1), and it does not teach inner and external surfaces that are concentric around the circumference of a ring, as presently recited. In fact, the structure 1 of Lederrey itself is not circular, but is either a rounded square/rectangle (FIGS. 1 and 3 of Lederrey), a substantially rectangle shape (FIG. 7; Col. 5, lines 7-9), or a part-circle and part-downward angled post to hold a watch band (FIG. 5). Thus, as previously discussed, Lederrey simply does not disclose much less suggest a ring with continuous concentric portions, as presently recited.

Moreover, Lederrey's watch case appears to require some type of band connection means, such as posts formed or screw holes for receiving screws, to permit attachment of watch bands to the sintered tungsten carbide case, and thus Lederrey cannot teach the recited features of claim 1 (*See, e.g.*, Lederrey at Col. 2, lines 20-22; Col. 3, lines 44-46). While Lederrey teaches a pair of recesses are left to attach a watch band to the hard metal carbide, no enabling details are provided. Lederrey does not and cannot make an annular ring for his watch case, because there would be no means for attaching a watchband to the case. He also fails to disclose, suggest or teach that the watchband connection means can be attached or connected to the stainless steel insert, much less a tungsten carbide portion. It is believed that this is not disclosed because there would be a possibility of separation of the insert from the tungsten carbide and loss of the insert or tungsten carbide component. For this additional reason, it is clear that Lederrey does not and cannot teach how to make an annular ring of sintered tungsten carbide for his products. Nor would it have been obvious to do so, because there is no teaching, suggestion or motivation present in that patent that would have led one of ordinary skill in the art to even consider such a construction prior to the time of Applicant's surprising and unexpected invention. Indeed, the closest prior art in the rejection, which is not even a jewelry ring as presently recited, is from almost 40 years ago—and the secondary reference from 70 years ago. It was not until the present invention was surprisingly achieved by Applicant that the long-felt need for improvements in jewelry rings was achieved.

The secondary reference, Kousin, fails to remedy the deficiencies of Lederrey. Kousin, which was issued in 1935 and discloses a watch case that includes an ornamental ring 8 preferably made of yellow or green gold. Kousin appears to teach that this ring 8 should be formed in the manner its inner shell is made—cheaply by stamping out sheet metal, preferably gold, platinum, or silver, albeit preferably yellow or green gold (Col. 2, lines 5-18). This ring 8 is fitted into a recess in another part by its outwardly tapering portion 9 (clearly shown in FIG. 5. The outer front edge of the inner shell 1 is also formed by sheet metal stamping to provide an outer front edge with a recess 6 tapering inwardly to a shoulder. Moreover, the ring 8 is made of a material sufficiently soft to engrave or ornamentally finish after being stamped (Col. 2, lines 5-7). Tungsten carbide is extremely hard and brittle, as previously described, and cannot simply be “stamped” or hand “engraved” as taught, *e.g.*, by Kousin.

Indeed, there was no motivation to modify Lederrey or Kousin to form the presently recited ring structure of predominantly tungsten carbide. More importantly, there would have been no reasonable expectation of success in modifying Lederrey’s structure to provide an elegant and surprisingly unexpected jewelry ring structure formed of a hard material that includes predominantly tungsten-carbide, as presently recited. It would not have been expected that the rounded structure of Kousin could have been formed of tungsten carbide, which itself cannot be stamped or forged. Moreover, Lederrey itself *teaches away* from such a combination by disclosing that tungsten or titanium carbide work pieces cannot be effectively machined after sintering (Col. 1, lines 45-48). Thus, Lederrey itself teaches that stamping or ornamental engraving of a hard material that includes predominantly tungsten carbide cannot be achieved, such that one of ordinary skill in the art would not have considered modifying the structure based on the teachings of Kousin.

Even if such a motivation to combine these references and a reasonable expectation of doing so did exist, claim 38, for example, recites that the concentric and continuous portions are also parallel. Kousin, however, teaches that its ring 8 is tapered at portion 9, and therefore does not suggest parallel portions as presently recited by claim 38.

Moreover, several other claims are further patentably distinct from the cited prior art. For example, claims 16 and 18-19 have been amended to more clearly and distinctly recite that the annular ring defines an aperture configured and dimensioned to receive a finger. Lederrey fails to teach such an article or method of forming such an article, because the watch case is formed only to reside upon or adjacent to the wearer. Moreover, claim 19 recites a hard metal-containing portion in the form of a coating disposed over a

portion of the hard material. Further Lederrey fails to teach a hard metal-containing portion in the form of a coating over the hard material, as presently recited. Additionally, independent claims 23 and 25-26 recite that the jewelry ring is unitary, which is not disclosed or suggested by Lederrey or Kousin. Indeed, each of the structures of Lederrey and Kousin are complicated and involve various parts, structures, and even different materials other than the presently recited metals and decoration components, such as watch crystals, which typically are not part of a jewelry ring. Claims 24 and 27 depend therefrom, as well. Moreover, Lederrey and Kousin are both directed to watch casings, which are not configured and adapted to receive a body part, much less a finger. Instead, the articles of the cited prior art must have posts, guides, or some other structure to permit a watch band to be associated thereto, as previously discussed. For this additional reason, Lederrey and Kousin together *teaches away* from a unitary structure of the presently claimed hard material by requiring a separate structure. Indeed, Lederrey teaches that a separate stainless steel portion must be used along with most embodiments of its the watch case to avoid the difficult machining that is otherwise required using a ring of the presently recited hard material comprising tungsten carbide. Kousin fails to remedy this deficiency, even teaches cheap machining techniques such as metal stamping or engraving. Furthermore, both Lederrey and Kousin require a watch glass or crystal to be inserted in the opening to protect the watch face that is added, and certainly neither is a finger ring nor is it intended to be used as a finger ring. Even if one attempted to use Lederrey's watch case structure as a finger ring, there would be those posts or squared corners that would interfere with, and possibly scratch or harm, adjacent fingers. Kousin's round watch faces do not suggest to remove the posts from Lederrey to form a finger ring, because its entire purpose is to form a watch by adding a time mechanism and protective watch glass. And the stamping of sheet metal by Kousin is a technique that cannot be used on hard material such as predominantly tungsten carbide materials. Thus, even the combination of cited references fails to disclose or even suggest the claimed invention and, in fact, teaches away from it.

Additionally, claims 10-12, 14-15, and new claims 28-38 recite additional features not present in even the watch case structures of the cited prior art. Claims 10-12 and 14-15 relate to a cavity in the annular ring structure, such as a continuous groove or slot, into which a decoration component can optionally be disposed. Lederrey does disclose an annular slot defined by uppermost surface 8, which receives an insert 3 of a watch glass retained in the cavity by mechanical fit, as noted in the Office Action. This annular slot, however, is disposed in a different part of the watch case than the other structure that the Patent Office

alleges is an annular ring (rather than part of a watch case). Thus, even if Lederrey disclosed an annular ring in the form of face 2 of its' substantially rectangular top portion, it is a completely different piece, flange 13, that is "adapted to receive the glass" insert 3 that the Office Action alleges could be a decoration component (Col. 3, lines 56-57). Thus, Lederrey simply does not disclose a cavity of the type presently recited in claim 10, much less a groove or slot of the type recited in claims 11-12 and 14-15.

New claim 28 further recites that the cylindrically shaped exterior portion comprises a continuous groove or slot that extends into, and at least substantially around, the circumference of the annular ring and that is configured and adapted to receive an insert of an annularly-shaped precious metal decoration component that provides a different visual effect to the ring relative to the hard material, and new claim 29 recites that the groove or slot extends entirely around the annular ring. Lederrey simply does not teach any such groove or slot, much less one that extends around an exterior portion, as presently recited. Lederrey also fails to teach a cylindrically shaped exterior portion, as recited in new claims 30, 32, and 35, much less one that is recessed from the surface of annular ring as recited in claims 30, 32, and 37. Claim 31 recites that the continuous portion includes every point on the inner and external surfaces, however, Lederrey simply does not teach or remotely illustrate this advantageous feature of the claimed jewelry rings. Moreover, claims 33-34 each recites in part that a portion of the external surface is rounded across a cross-section of the annular ring that is transverse to the concentric continuous portion, and Lederrey fails to teach rounded external cross-sections of any kind in a transverse direction to a concentric continuous portion. In view of the discussion regarding new claim 28 above, it should also be noted that Lederrey fails to teach that the groove or slot extends entirely around the annular ring, as recited in new claim 36. As such, it is respectfully submitted that the rejection of claims 23-27 under 35 U.S.C. § 103(a) should be reconsidered and withdrawn, as no *prima facie* case of obviousness has been stated on the record.

Furthermore, even if a *prima facie* case of obviousness could still be made in view of the above-noted deficiencies in the cited references, Applicant submits herewith a Declaration of Trent West Under 37 C.F.R. § 1.132 (the "West Declaration") to demonstrate the commercial success of annular rings according to the claimed invention. A copy of the West Declaration is attached.

The West Declaration provides evidence that the jewelry rings according to the claimed invention are seen as inventive by consumers and even fellow jewelry artisans. With minimal advertising and marketing (West Declaration at ¶¶ 5-6), the Applicant has

developed a new market for the claimed jewelry rings (West Declaration at ¶¶ 6-7). Moreover, the jewelry rings according to the claimed methods has been tremendously commercially successful. In just over five years, Applicant has grown sales from nothing into a multi-million dollar business (West Declaration at ¶¶ 6 and 10). It is also believed, in view of the minimal advertising and marketing expenses, that it is the inventive features of the jewelry ring, which are claimed in the application, that have led to this commercial success (West Declaration at ¶¶ 8-10). In view of the evidence presented in the West Declaration, coupled with the copying by others in the jewelry field, *e.g.*, the Titanium Era reference cited in an Information Disclosure Statement on December 10, 2004, it is believed that even a *prima facie* case of obviousness has been clearly rebutted. As such, Applicant respectfully requests that the rejections under 35 U.S.C. § 103(a) be reconsidered and withdrawn.

The Office Action also mentioned it was not relying on two additional references, U.S. Patent Nos. 4,706,857 to Aellen et al. (“Aellen”) and 4,574,011 to Bonjour (“Bonjour”). Aellen discloses a watch formed of a steel piece that includes a “watch bracelet” formed of various links. Initially, Aellen does not teach an annular ring; a hard material comprising a predominantly tungsten carbide material and a binder component; a polished grey mirror finish; the material being long wearing and virtually indestructible during normal use of the jewelry ring; or that a continuous portion of each of the inner and external surfaces is concentric around the circumference of the ring, as presently recited. Aellen does appear to disclose a circular portion, however, this is not even a metal, much less a hard material of the type presently recited. Rather, Aellen discloses a flexible tie 6 that is overmolded with plastic material 26 charged with carbon fibers (Col. 4, lines 1-3) to help distinguish the watch from the watch bracelet. Clearly, no motivation would exist to modify a tungsten carbide work piece from Lederrey into a different shape using a non-metal material such as the plastic of Aellen.

Bonjour teaches sintered alloys based on a mixture of carbides. Indeed, it teaches 75 to 90 percent by weight of a mixture of tungsten carbide and titanium carbide, with each forming half of the carbides. From the examples, it appears that only ratio taught is a 50:50 ratio, such that neither carbide is taught to be present in more than 45 weight percent of the total composition. The present invention, however, recites a predominantly tungsten carbide material. Moreover, the Bonjour articles have a density of only 7.6 to 8, which is significantly below that achieved by predominantly tungsten carbide rings as presently recited


(See, e.g., claims 21 and 25). Thus, Bonjour and Aellen each fail to disclose or even suggest the claimed invention.

Accordingly, Applicant respectfully submits that all claims are in condition for allowance. Should the Examiner not agree with this position, a telephone or personal interview is requested with the undersigned attorney for Applicant to resolve any remaining issues and expedite allowance of this application, and Applicant would be honored to attend such a meeting to discuss the patentability of the claimed invention.

Respectfully submitted,

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Date



Jeffrey A. Wolfson (Reg. No. 42,234)

WINSTON & STRAWN LLP
Customer No. 28765

(202) 282-5770